


Notice of Allowability	Application No.	Applicant(s)	
	10/009,937	KURATA ET AL	
	Examiner	Art Unit	
	Michael P. Stafira	2877	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to after final amendment filed 7/7/2004.
2. ☒ The allowed claim(s) is/are 15 and 40-52.
3. ☒ The drawings filed on 04 June 2002 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).


* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| <ol style="list-style-type: none"> 1. <input type="checkbox"/> Notice of References Cited (PTO-892) 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | <ol style="list-style-type: none"> 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. 7. <input type="checkbox"/> Examiner's Amendment/Comment 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance 9. <input type="checkbox"/> Other _____. |
|---|--|


 Michael P. Stafira
 Primary Examiner
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DETAILED ACTION

Allowable Subject Matter

1. Claims 15,40-52 are allowed over the prior art of record.
2. The following is an examiner's statement of reasons for allowance:

Regarding claim 40, the prior art fails to disclose or make obvious a method for detecting a pretilt angle of an element in which the direction of the orientation of molecules is twisted from a light incident side to light outgoing side having the step of determining the pretilt angle of the element based upon the analysis results wherein an average tilt angle is determined based upon the determined apparent retardation for the plurality of light incident angles, and the pretilt angle is determined based upon the determined average tilt angle, and in combination with the other recited limitations of claim40.

Regarding claim 41, the prior art fails to disclose or make obvious a method for detecting a pretilt angle of an element in which the direction of the orientation of molecules is twisted from a light incident side to light outgoing side having the step of measuring transmitted light intensity of light from the light incident side for a plurality of light incident angles by rotating the element about an axis perpendicular to the direction of transmitted light towards the element wherein the transmitted light intensity is measured in a state in which the following relationship is valid between the orientation direction of molecules at the light incident side interface of the element and the twist angle of the element, and in combination with the other recited limitations of claim 41.

Regarding claim 42, the prior art fails to disclose or make obvious a method for detecting a pretilt angle of an element in which the direction of the orientation of molecules is twisted from

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a light incident side to light outgoing side having the step of measuring transmitted light intensity of light from the light incident side for a plurality of light incident angles by rotating the element about an axis perpendicular to the direction of transmitted light towards the element, wherein the transmitted light intensity is measured in a state in which the following relationship is valid between the orientation direction of molecules at the light incident side interface of the element and the twist angle of the element, and in combination with the other recited limitations of claim 42.

Regarding claim 43, the prior art fails to disclose or make obvious a method for detecting a pretilt angle of an element in which the direction of the orientation of molecules is twisted from a light incident side to light outgoing side having the step of detecting the pretilt angle of the element based upon the analysis result, an average tilt angle is determined based upon the determined retardation for the plurality of light incident angles, and the pretilt angle is determined based upon the average tilt angle, and in combination with the other recited limitations of claim 43. Claim 15 is allowed by the virtue of dependency on the allowed claim 43.

Regarding claim 44, the prior art fails to disclose or make obvious a method for detecting a pretilt angle of an element in which the direction of the orientation of molecules is twisted from a light incident side to light outgoing side having the step of measuring the transmitted light intensity for the plurality of light incident angles, the transmitted light intensity is measured in a state in which the following relationship is valid between the orientation direction of molecules at the light incident side interface of the element and the twist angle of the element., and in combination with the other recited limitations of claim 44.

Regarding claim 45, the prior art fails to disclose or make obvious a method for detecting a pretilt angle of an element in which the direction of the orientation of molecules is twisted from a light incident side to light outgoing side having the step of determining the average tilt angle based upon the determined apparent retardation for the plurality of light incident angles and determines the pretilt angle based upon the determined average tilt angle, and in combination with the other recited limitations of claim 45.

Regarding claim 46, the prior art fails to disclose or make obvious a method for detecting a pretilt angle of an element in which the direction of the orientation of molecules is twisted from a light incident side to light outgoing side having the step of determining based upon the transmitted light intensity in a state in which the following relationship is valid between the orientation direction of molecules at the light incident side interface of the element and the twist angle of the element, and in combination with the other recited limitations of claim 46.

Regarding claim 47, the prior art fails to disclose or make obvious a method for detecting a pretilt angle of an element in which the direction of the orientation of molecules is twisted from a light incident side to light outgoing side having the step of determining the average tilt angle based upon the determined apparent retardation for the plurality of light incident angles and determines the pretilt angle based upon the determined average tilt angle, and in combination with the other recited limitations of claim 47.

Regarding claim 48, the prior art fails to disclose or make obvious a method for detecting a pretilt angle of an element in which the direction of the orientation of molecules is twisted from a light incident side to light outgoing side having the step of determining based upon the transmitted light intensity in a state in which the following relationship is valid between the

orientation direction of molecules at the light incident side interface of the element and the twist angle of the element, and in combination with the other recited limitations of claim 48.

Regarding claim 49, the prior art fails to disclose or make obvious a method for detecting a pretilt angle of an element in which the direction of the orientation of molecules is twisted from a light incident side to light outgoing side having the step of determining the average tilt angle based upon the determined apparent retardation for the plurality of light incident angles and determines the pretilt angle based upon the determined average tilt angle, and in combination with the other recited limitations of claim 49.

Regarding claim 50, the prior art fails to disclose or make obvious a method for detecting a pretilt angle of an element in which the direction of the orientation of molecules is twisted from a light incident side to light outgoing side having the step of determining based upon the transmitted light intensity in a state in which the following relationship is valid between the orientation direction of molecules at the light incident side interface of the element and the twist angle of the element, and in combination with the other recited limitations of claim 50.

Regarding claim 51, the prior art fails to disclose or make obvious a method for detecting a pretilt angle of an element in which the direction of the orientation of molecules is twisted from a light incident side to light outgoing side having the step of determining the average tilt angle base upon the determined apparent retardation for the plurality of light incident angles and determines the pretilt angle based upon the determined average tilt angle, and in combination with the other recited limitations of claim 51.

Regarding claim 52, the prior art fails to disclose or make obvious a method for detecting a pretilt angle of an element in which the direction of the orientation of molecules is twisted from

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a light incident side to light outgoing side having the step of determining based upon the transmitted light intensity in a state in which the following relationship is valid between the orientation direction of molecules at the light incident side interface of the element and the twist angle of the element, and in combination with the other recited limitations of claim 52.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael P. Stafira whose telephone number is 571-272-2430. The examiner can normally be reached on 4/10 Schedule Mon.-Thurs..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Toatley can be reached on 571-272-2059. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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A handwritten signature in black ink, appearing to read 'M. P. Stafira', with a stylized, sweeping flourish at the end.

Michael P. Stafira
Primary Examiner
Art Unit 2877

July 22, 2004